United States Department of Agriculture
Natural Resources Conservation Service

Water Management Enhancement Activity – Field Poly Tubing and Drip Tape Recycling

Field Poly Tubing and Tape Recycling

NRCS has for a number or years encouraged use of field poly tubing in low head irrigation water conveyance and delivery systems to reduce water loss and improve surface irrigation system efficiency. The tubing generally has an anticipated lifespan of one irrigation season. It is then removed and replaced with new tubing.

Disposal of used tubing can be a significant and expensive problem. Farmers have employed burning, onsite burial, disposal in landfills, and onsite long-term storage as ways of dealing with the waste material. Huge piles of waste tubing are sometimes seen in irrigated areas, as well as, large barrels used for burning. Melted lumps of material sometimes result when individuals try to burn an entire roll rather than a piece at a time. Commercial or municipal landfills are sometimes not "permitted", or willing to accept the material. Landfill disposal prices are also a concern.

Benefits

Participation in a field poly recycling program will have positive environmental impact by reducing burning of used tubing, saving space in landfills, and preventing used tubing from stacking up on the farm. In addition, natural gas is used to produce virgin poly resin used in the manufacturer of numerous plastic products (i.e., trash bags, grocery sacks, field poly tubing, and plastic wrap). Many of these products are also made from recycled poly resin thus saving natural gas. Energy savings will result from participation in these recycling efforts.

Criteria for Field Poly Tubing and Drip Tape Recycling Enhancement Activity

This enhancement requires the grower to participate in a field poly tubing or drip tape recycling program in which the producer rolls up his used field poly tubing or drip tape, stores it at an on or off-site location approved by the recycling company until being picked up or it is delivered to the recycling center. The activity is considered complete when the recycling company picks up the material from the approved temporary on or off-site location for transport to a poly recycling facility or the material is delivered to the recycling facility.

Reference:

Natural Resources Conservation Service. 1991. National Engineering Handbook, 2nd Edition, Chapter 15, Irrigation 210-VI. USDA-NRCS. Washington, D.C.

Natural Resources Conservation Service, National Engineering Handbook, Part 652, Irrigation Guide, 1996.

http://www.deltapl.com/onthefarm.htm